

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

Nicolai Lehnert, assistant professor of chemistry, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of chemistry, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D. 1999 University Mainz
Diploma 1995 Heinrich-Heine-University Düsseldorf

Professional Record:

2007 – 2010 Dow Corning Assistant Professor of Chemistry, University of Michigan
2006 – present Assistant Professor, Department of Chemistry, University of Michigan
2001 – 2006 Habilitation, Institute of Inorganic Chemistry, Christian-Albrechts-University Kiel
1999 – 2000 Post-doctoral Fellow, Stanford University

Summary of Evaluation:

Teaching – Professor Lehnert is dedicated teacher and research mentor to a large cohort of undergraduate and graduate students. Students respect his scholarly approach and he has received excellent teaching evaluations from them. Professor Lehnert developed and taught a new branch of the sophomore inorganic chemistry course by using biological examples to present the framework of inorganic chemistry. He also made significant modifications to the curriculum of the graduate inorganic courses. In addition to his didactic teaching, Professor Lehnert has also served on multiple graduate student thesis and preliminary committees.

Research – Professor Lehnert's research area is interdisciplinary, bridging inorganic chemistry, physical chemistry, and chemical biology. His research effort combines sophisticated spectroscopic and computational tools to obtain detailed descriptions of the electronic structures of metal complexes and to provide insight into the reactivity of these materials. His research group has been very productive, publishing 30 publications during his time at Michigan, many of which are in high quality, high impact journals. His research has been funded by external grants from the American Chemical Society, Petroleum Research Fund, 3M, and the National Science Foundation (CAREER).

Recent and Significant Publications:

“Electronic structure of heme-nitrosyls and its significance for nitric oxide reactivity, sensing, transport, and toxicity in biological systems,” with L. E. Goodrich, et al., *Inorganic Chemistry*, 49, 2010, pp. 6293-6316
“Iron-porphyrin NO complexes with covalently attached N-donor ligands: The formation of a stable six-coordinate species in solution,” with T. C. Berto, et al., *Journal of the American Chemical Society*, 131, 2009, pp. 17116-17126

“The vibrational assignments of six-Coordinate ferrous heme nitrosyls: New insight from nuclear resonance vibrational spectroscopy,” with F. Paulat, et al., *Inorganic Chemistry*, 47, 2008, pp. 11449-11451

“Electronic structure of six-coordinate iron(III)-porphyrin NO adducts: the elusive Fe(III)-NO(radical) state and its influence on the properties of these complexes,” with V. K. K. Praneeth, et al., *Journal of the American Chemical Society*, 130, 2008, pp. 15288-15303.

Service – Professor Lehnert has served on departmental committees, including the Recruiting Committee where he redesigned the departmental brochure and the inorganic chemistry website to increase graduate applications. He has been a leader in the bioinorganic community at Michigan and nationally, organizing a campus-wide meeting, organizing symposia at the national American Chemical Society meetings, and editing a Forum in *Inorganic Chemistry*.

External Reviews:

Reviewer (A)

“...I am strongly supportive of the promotion of Lehnert to Associate Professor with tenure. ...Lehnert will not disappoint.”

Reviewer (B)

“As is characteristic of Nicolai’s work, these papers are expertly written and display strong command of the meaning of the spectroscopic data and the insights to be derived from it. ... He has been highly productive and highly visible in the bioinorganic community.”

Reviewer (C)

“...Dr. Lehnert absolutely deserved promotion and tenure. As an independent scientist at the University of Michigan, he has in my estimation become a force in his subfield... Dr. Lehnert possesses exceptionally strong intellectual capabilities which allow critical application and evaluation of all such studies, and which have already brought new insights and important advances.”

Reviewer (D)

“...Dr. Lehnert is an important and visible contributor. He is well liked and respected, active in the community, and publishes frequently.”

Reviewer (E)

“...I think that he stands at the top, among the very best working in this field. ... I am...impressed with the creativity and thoroughness of the work which Dr. Lehnert has already done, and I am quite convinced that he will be an outstanding faculty member at the University of Michigan for decades to come.”

Reviewer (F)

“Nicolai is an outstanding Physical-Inorganic chemist. ...[he] has a research program that has great momentum and continues to have high impact in an important area of biology and inorganic chemistry.”

Reviewer (G)

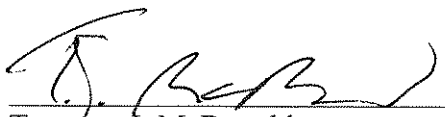
“...even applying the rigorous standards of my institution I am quite certain that Dr. Lehnert would be promoted in my department. ... This is a solid, substantive and innovative record of scientific achievement.”

Reviewer (H)

“...I do believe that Dr. Nicolai Lehnert combines all aspects that are required for a successful and prolific scientific career. I believe that his scientific performance would be competitive anywhere in the world.”

Summary of Recommendation:

Professor Lehnert is an innovative researcher and a dedicated teacher with a strong service record. The Executive Committee of the College of Literature, Science and the Arts and I recommend that Assistant Professor Nicolai Lehnert be promoted to the rank of associate professor of chemistry, with tenure, in the College of Literature, Science, and the Arts.



Terrence J. McDonald
Arthur F. Thurnau Professor,
Professor of History, and Dean,
College of Literature, Science, and the Arts

May 2012